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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,615

07/01/2003

Hiroyasu Inoue

890050.434

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03/06/2006

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EXAMINER

CHEN, TIANJIE

ART UNIT

PAPER NUMBER

2656

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,615

Applicant(s)

INOUE ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) 2,4,6,8,10 and 11 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3,5,7 and 9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### ***Final Rejection***

1. Applicant's election without traverse of Species II with claims 1, 3, 5, 7, and 9 in the reply filed on 01/13/2006 is acknowledged.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Aratani et al (US 6,788,635).

Claim 1, Aratani et al shows an optical recording medium in Fig. 6 including a substrate 31, a light transmission layer 1 and a plurality of recording layers 2 and 32 between the substrate and the light transmission layer and capable of recording data in the plurality of recording layers and reproducing data recorded in the plurality of recording layers by projecting a laser beam via the light transmission layer onto the plurality of recording layers (Fig. 6; column 10, line 50 to column 11, line 4), wherein data recorded in and reproduced from recording layer 32, which is farthest from the light transmission layer 1, by projecting the laser beam thereonto via the light transmission layer and at least one recording layer 2 other than the farthest recording layer 32 and the at least one recording layer other than a farthest recording layer from the light transmission layer includes a reflective film 3 containing Ag as a primary

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component and additive is added, wherein C is used as an additive in Ag (Column 10, lines 18-28).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukuda et al (US 2002/0060979) in view of Aratani et al.

Claims 1 and 3, Tsukuda et al shows an optical recording medium in Fig. 1 including a substrate 114 ([0041] last line), a light transmission layer 101 and a plurality of recording layers 103 and 109 ([0043]) between the substrate and the light transmission layer and capable of recording data in the plurality of recording layers and reproducing data recorded in the plurality of recording layers by projecting a laser beam via the light transmission layer 101 onto the plurality of recording layers, wherein data recorded in and reproduced from recording layer 109, which is farthest from the light transmission layer 101, by projecting the laser beam thereonto via the light transmission layer 101 and at least one recording layer 103 other than the farthest recording layer 109 and the at least one recording layer other than a farthest recording layer from the light transmission layer includes a reflective film 107 ([0043]) containing Ag as a primary component; each of the plurality of recording layers includes a first recording film 105 and 111 ([0043] and [0044]) containing Ge as a primary component and a second recording film 104 and 110 disposed in the vicinity

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of the first recording film and containing Zn, which is different from the element contained in the first recording film as a primary component and the element contained in the first recording film as a primary component and the element contained in the second recording film as a primary component are mixed when the first recording film and the second recording film is irradiated with a laser beam, thereby forming a record mark.

Tsukuda shows the reflective film is a metal alloy of primary Ag, but fails to show the minor composition.

Aratani et al shows an optical recording medium, wherein the reflective film is made of Ag as a primary component and C as an additive (Column 10, lines 18-28) and teaches by changing the relative composition, the required change in reflectance can be obtained. One of ordinary skill in the art would have been motivated to add C to adjust the reflectance to meet the needs for forming a desired reflective film with desired reflectance.

Claim 5, Aratani et al teaches the reflective film included in the at least one recording layer contains 0.5 atomic % to 5.0 atomic % of C.

Claim 7, Aratani et al teaches that the reflective film included in the at least one recording layer contains 1.0 atomic % to 4.0 atomic % of C.

Claim 9, Aratani et al teaches that the reflective film included in the at least one recording layer contains about 2.5 atomic % of C.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**TIANJIE CHEN**  
**PRIMARY EXAMINER**